

NORTHERN DISTRICT OF NEW YORK

JOSEPH WILLIAMS,

Plaintiff,

**ATTORNEY AFFIRMATION
IN SUPPORT OF MOTION
FOR CLASS CERTIFICATION**

-vs-

Civil Case No: 9:15-cv-00427

EUGENE CONWAY ONONDAGA COUNTY SHERIFF,
ONONDAGA COUNTY, ONONDAGA COUNTY
SHERIFF'S OFFICE, ESTEBAN GONZALEZ CHIEF
CUSTODY DEPUTY ONONDAGA COUNTY JUSTICE
CENTER, THOMAS MCDOWELL SERGEANT
ONONDAGA COUNTY JUSTICE CENTER,
JOHN HINTON DEPUTY ONONDAGA COUNTY
JUSTICE CENTER.

Defendants.

JOSHUA T COTTER, an attorney admitted to practice law in the State of New York and in the Northern District of New York, affirms under penalty of perjury as follows:

1. I am an attorney duly licensed to practice law in the State of New York, and am admitted to practice in the Northern District of New York. I am employed as a Staff Attorney for Legal Services of Central New York, Inc., counsel for the Plaintiff Joseph Williams in this matter. As such, I am fully familiar with the facts and circumstances of this proceeding.

2. I make this affirmation in support of Plaintiff's motion, pursuant to Rule 23 of the Federal Rules of Civil Procedure to certify a class defined as: "all present and future deaf and hearing-impaired prisoners of the Onondaga County Justice Center who have been, are, or will be discriminated against, solely on the basis of their disability, in receiving the rights and privileges accorded to all other prisoners".

3. The Onondaga County Justice Center (the jail) houses pre-trial detainees as well as prisoners who have been sentenced and are awaiting transfer to correctional facilities where they will serve their sentences.

4. Each year on average more than ten thousand men and women are incarcerated at the jail. (A copy of the custody portion of the “2011 Sheriff’s Office Annual Report” is annexed hereto and made a part hereof as Exhibit A.)

5. The average length of stay for a prisoner at the jail is twenty-two days. (A copy of a news article referencing the average length of stay at the jail is annexed here to and made a part hereof as Exhibit B)

6. Based on a report by the Bureau of Justice Statistics approximately six percent of the local jail population has at least a hearing impairment meaning they have difficulty understanding normal conversation even with a hearing aide. (A copy of the Bureau of Justice Statistics report is annexed hereto and made a part hereof as Exhibit C).

7. Although there is not definitive data on the subject, the portion of the United States population who is deaf and utilizes a sign language interpreter is estimated by Gallaudet University, a federal chartered university for the deaf and hard of hearing, to be at approximately 0.14% of the total population. (A copy of the report from Gallaudet University is annexed hereto and made a part hereof as Exhibit D)

8. Deaf or hard of hearing individuals are statistically more likely to be convicted of a violent crime than the general population. (A copy of the study “Violent Offenders in a Deaf Prison Population” is annexed hereto and made a part hereof as Exhibit E)

9. Mr. Williams will soon be transferred to DOCCS custody to serve his agreed upon sentence. Therefore, class certification is necessary in order to preserve the class’ request for

declaratory and injunctive relief. Denying class certification would mean each member of the class would have to bring their own separate lawsuit to attempt to address this issue which could lead to differing opinions by the Court.

10. Further, due to the nature of incarceration at the jail, the average length of stay there being only twenty-two days, it would be impossible for any plaintiff to receive a final disposition from the Court on their requests for declaratory and injunctive relief.

11. Therefore, in order to ensure the issues addressed in the Plaintiffs' Complaint are addressed by this Court, it is respectfully requested that this Court grant Plaintiffs' motion for class certification.

12. No prior application for the relief requested herein has been made to this, or any other Court.

Dated: Syracuse, New York
May 13, 2015

/S/ Joshua Cotter
JOSHUA T COTTER, ESQ.
LEGAL SERVICES OF
CENTRAL NEW YORK, INC.
Joshua T. Cotter (518217)
Attorneys for the Plaintiff
472 South Salina Street, Third Fl.
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(315)-703-6579

Exhibit A

Custody Department

The Custody Administration Section encompasses the Compliance Unit and Programs Unit. The Section's primary purpose is to assist in the management of the inmate population. This is done through a comprehensive classification process, an objective disciplinary hearing procedure, and a transparent grievance program. The Section is the primary liaison with all outside agencies in support of the facility or of the Inmate population.

Custody Administration Section

| Use of Force Cases |
|-------------------------|
| 204 |
| Cases Closed |
| 197 |
| Sent for further review |
| 7 |

| Incident Reports | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Inmate Disciplines | 1767 |
| Inmate Misconduct Resolution Report issued | 828 |
| Hearings held * TOTAL | 761 |
| Misbehavior Reports issued | 939 |
| Inmates release before hearing | 178 |
| Disciplinary Surcharge | 631 |
| Total Charged | \$4,373.25 |
| Total Collected* | \$3,083.59 |
| *Money collected is lower than charged due to lack of funds in inmate's account during incarceration at the Justice Center for the 2011 calendar year. | |

In 2011 the Booking Unit implemented a new goal of conducting use of force reviews for incidents occurring in the Booking Unit. This has proved to be a valuable tool and has helped staff see areas for improvement and shows how similar situations can be handled in a better manner.

| Booking Intake Information | | | |
|----------------------------|---------------|---------------|---------------|
| | 2009 | 2010 | 2011 |
| 1=City | 4,157 | 3,259 | 2811 |
| 2=County | 4,623 | 4,157 | 4147 |
| 3=Remanded | 3,239 | 3,534 | 3935 |
| Total | 12,019 | 10,950 | 10,893 |



2011 was a very busy year for the SERT team. Activations increased by **45.57 %** with noncompliant activations increasing by **29.03 %**. Even with the massive increase in the number of activations, the total injuries to staff and inmates remained unchanged.

2011 the Control Unit saw many training advancements with Lt. J. Barrella, Lt. E. Salvagni, Sgt. T Quinn, Dep. W. Demko, Dep. K. Giles, Dep. M. Marino and Dep. C. Wilson received updated training and were certified as SERT Instructors by TJA Force Training Inc.

All Custody Department members were issued **stab/slash vests** that offer protection against edged weapon attacks. SERT members were issued tactical carriers for the vest panels that allow equipment (ERB, radio, flashlight, etc.) to be carried on the vest.

Funds were secured to purchase stab/slash/blunt trauma vests for all SERT members. These vests will be used during noncompliant cell extractions and offer added protection to the bicep, groin and throat areas.

| Activations by Watch | | | | |
|--------------------------|------------|------------|------------|------------|
| Watch | 2008 | 2009 | 2010 | 2011 |
| A Watch (2300 to 0700) | 13 | 10 | 9 | 12 |
| B Watch (0700 to 1500) | 153 | 117 | 71 | 107 |
| C Watch (1500 to 2300) | 166 | 157 | 157 | 226 |
| Total Activations | 332 | 284 | 237 | 345 |



Custody Department

With ever changing standards and an inmate population approaching the maximum limit, our staff continues keep the residents of Onondaga County safe 365 days a year.

In September of 2011 all the 2010 recruit class Deputies completed their FTO training and were added to the permanent staff at the Justice Center .

A goal in 2011 was to conduct written inspections of the Justice Center logbooks for better accuracy and completing the proper documentation of incidents that occur. Along with inspections, additional training to staff was completed. this helped to reduce the risk of lawsuits.

| Total Inmates Received | | |
|------------------------|--------|--------|
| Male | Female | Total |
| 8,447 | 2,455 | 10,902 |



| Inmates Remanded to the Justice Center | | | |
|----------------------------------------|------|--------|--------|
| | Male | Female | Total |
| Felony | 2423 | 592 | 3015 |
| Misdemeanor | 3459 | 1365 | 4824 |
| Other | 2361 | 458 | 2819 |
| Total | 8243 | 2415 | 10,658 |



The year 2011 continued to be an active one for the Transport Unit. with several areas exceeding last years totals. This did not deter the Unit from attaining some goals. Transport reduced the Man Hours for Medical Transports by **1,256.75** hours.

The Transport Section transported **3,111** more inmates in 2011 than in 2010. This was done with less details (-312), less man hours (-1,746.25) and utilizing less overtime hours (-540.50) the diligent work of the entire Transport Section is commendable.

On September 29th, 2011 Sheriff Kevin Walsh along with Undersheriff Warren Darby, judicial staff members, and local media were present in the Transport Office to rename the Transport Office to the **William "Billy" Hess Transport Office**. Billy retired from the Sheriff's office after completing **35 years** of service, earlier this year.



| Assist to Justice Center | | | | |
|--------------------------|---------|---------|-------|-----------|
| Year | Details | Inmates | Miles | Man Hours |
| 2010 | 436 | 220 | 936 | 2,582.0 |
| 2011 | 465 | 286 | 421 | 2,637.75 |
| Difference | +29 | +66 | -515 | +55.75 |

| Justice Courts | | | | |
|----------------|---------|---------|--------|-----------|
| Year | Details | Inmates | Miles | Man Hours |
| 2010 | 1,275 | 1,829 | 22,490 | 5,589.50 |
| 2011 | 1,395 | 2,109 | 22,910 | 6,240.25 |
| + / - | +120 | +280 | +420 | +650.75 |

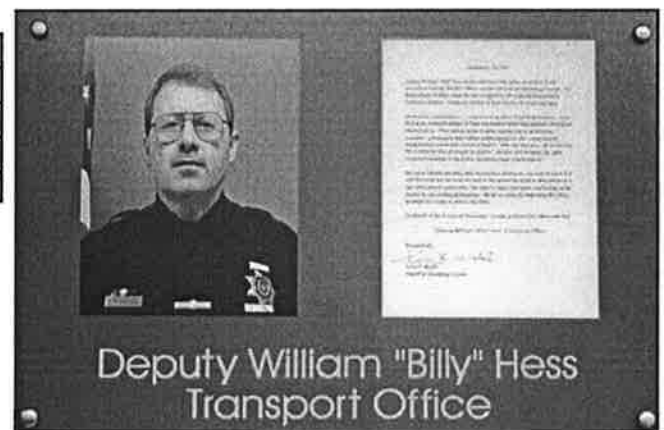


Exhibit B

Wednesday, May 13, 2015

50° Overcast

Hi: 57° | Lo: 36°



Cool. Overcast, a sprinkle this AM. Sun develops this PM.
View Peter Hall's Complete Forecast

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Autistic son motivates Onondaga County's chief jailer to be compassionate

by Jim Kenyon

Posted: 02.13.2014 at 3:18 PM

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SYRACUSE -- Esteban Gonzales became a jail deputy when the Onondaga County Justice Center was under construction. Now, 20 years later, Gonzales is the chief deputy in charge of the day-to-day operation at the jail.



Esteban Gonzales / photo: Andy Wolf

"There is no more efficient model of a jail that I've seen in the country... and I've visited 190 jails," Gonzales told CNY Central's Jim Kenyon. He says his assessment is based on his position as a nationally recognized expert on incarceration. As president of the American Jail Association, Onondaga County's chief jailer has testified before Congress and has been quoted in numerous publications including the Wall Street Journal about the state of the nation's jails and how to improve them.

"I work with the board of directors of the American Jail Association. So I know all the cutting edge technology that's out there," he says.

Gonzales says he's bringing that "cutting edge" to the Justice Center at a time when county legislators are considering a \$30 million expansion. He will oversee the construction of a new more efficient mental health wing.

Gonzales also intends to improve the infirmary, which has come under criticism over the years following the deaths of several inmates. He intends to improve medical care so that fewer inmates are sent to local hospitals.

Dr. Anne Calkins is the newly hired medical director, with 15 years of experience in emergency care.

"I'm hoping to keep folks not having to go to the emergency departments which are already overcrowded, but also just facilitating care here within the justice center will make things easier for the deputies and the continuity of care for the inmates would be more comprehensive," she said.

The average length of stay for an inmate at the Justice Center is 22 days. The sheriff's department has partnered with the Syracuse City School District to offer a program called "Incarcerated Education". It offers 22 courses, including GED education, life management, plumbing, and even a course on becoming a licensed nail technician.

Gonzales wants to expand the educational program to provide college-level courses.

Gonzales says he is motivated by his autistic 20 year old son, Dylan, who can't speak and needs constant care. "He is an adult man with the emotional capacity of a young child. He will probably be with my wife and I for the rest of our lives."

He adds, "What I bring to this jail is a compassion beyond all compassion for the people that don't have a voice, for the people that are the most needy in society... when they come here, it's our job to treat them humane, to treat them safely and to give them everything available to the rest of the public."

Gonzales says he's proud of the Justice Center and hopes more people become aware of what happens inside the walls of the county jail.

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Exhibit C



Bureau of Justice Statistics Special Report

November 2006, NCJ 210696

Medical Problems of Jail Inmates

By Laura M. Maruschak
BJS Statistician

In 2002 an estimated 229,000 jail inmates reported having a current medical problem other than a cold or virus. Many of these problems reflect conditions existing before admission. Medical problems reported by inmates included:

- arthritis (13%)
- hypertension (11%)
- asthma (10%)
- and heart problems (6%).

Under 5% of inmates reported cancer, paralysis, stroke, diabetes, kidney problems, liver problems, hepatitis, sexually transmitted diseases, tuberculosis (TB), or human immunodeficiency virus (HIV).

An estimated 227,200 jail inmates reported having impaired functioning, most commonly a learning impairment (22%), such as dyslexia or attention deficit disorder, or having been enrolled in special education classes. Around 2% of jail inmates said they had a mobility impairment, requiring the use of a cane, walker, wheelchair, or other aids to do daily activities. About 8% of jail inmates said they had a mental health condition that kept them from participating fully in school, work, or other activities.

An estimated 83,000 jail inmates reported being injured since admission. About 7% of jail inmates reported being injured in a fight and 7% reported an injury due to an accident.

The findings in this report are based on the 2002 Survey of Inmates in Local Jails. Data are presented separately on medical problems, impairments, and injuries reported by jail inmates.

Highlights

More than a third of jail inmates reported having a current medical problem

| | Total | Percent of inmates | |
|--------------------------|-------|--------------------|-------------|
| | | Convicted | Unconvicted |
| Current medical problem* | 36.9% | 35.8% | 37.7% |
| Any impairment | 36.6 | 35.2 | 37.0 |
| Injury since admission | 13.4 | 12.6 | 15.6 |

*Medical problems include at least 1 of 14 specific problems (see note on table 1). Excludes reports of a cold or flu.

- 42% of inmates who reported a current medical problem said they had seen a health care professional about the problem.

- Nearly two-thirds of jail inmates said they had been tested for tuberculosis since admission; over a fifth reported being tested for HIV.

22% of jail inmates reported having a learning impairment; 11% said they had impaired vision

| | Percent of jail inmates | | |
|--------------------|-------------------------|-----------|-------------|
| Type of impairment | Total | Convicted | Unconvicted |
| Physical | 33.9% | 32.7% | 34.3% |
| Learning | 21.7 | 20.8 | 21.5 |
| Speech | 3.7 | 3.4 | 4.4 |
| Hearing | 6.4 | 6.3 | 6.0 |
| Vision | 11.3 | 10.5 | 12.3 |
| Mobility* | 1.7 | 1.4 | 2.3 |
| Mental | 8.3 | 7.2 | 9.3 |

*Includes use of a cane, wheelchair, walker, hearing aid, or other aids in daily activity.

- Around 15% of all jail inmates reported having two or more impairments.

- About 1 in 5 jail inmates said they considered themselves to have a disability.

- Heart valve damage (290 per 10,000 inmates) and arrhythmia (211 per 10,000) were the most commonly reported types of heart problems.

- About a quarter of convicted (26%) and unconvicted (25%) jail inmates reported having a dental problem.

- Inmates age 24 or younger (17%) were more than twice as likely as those age 45 or older (8%) to report being injured since admission.

- About 61% of inmates age 45 or older reported having a current medical problem; 44% reported an impairment.

- More than half (53%) of female jail inmates reported having a current medical problem, compared to about a third (35%) of male inmates.

- About 5% of female jail inmates said they were pregnant at the time of admission.

- Among inmates who were homeless in the year before their arrest, 49% reported a current medical problem, compared to 35% of those who were not homeless.

- More than 4 in 10 inmates reported having a medical exam since admission to jail.

22% of jail inmates reported one medical problem; 14%, two or more

The majority of jail inmates (63%) did not report a current medical problem. Around a fifth (22%) reported having 1 of 14 specific medical problems (See note on table 1) and 14% reported two or more.

| Number of current medical problems | Percent of jail inmates | | |
|------------------------------------|-------------------------|-------|--------|
| | Total | Male | Female |
| 0 | 63.1% | 65.2% | 47.4% |
| 1 | 22.4 | 21.7 | 28.3 |
| 2 | 8.7 | 8.1 | 13.5 |
| 3 or more | 5.7 | 5.0 | 10.8 |

The prevalence of a current medical problem did not vary by conviction status. Nearly the same percentage of convicted (36%) and unconvicted jail inmates (38%) reported having a current medical problem (table 1).

Medical problems were highest among female and older inmates

More than half (53%) of female jail inmates reported having a current medical problem, compared to about a third (35%) of male jail inmates. Male and female inmates were equally likely to report having had surgery since their admission (about 1.4%).

Among jail inmates age 45 or older, 61% reported a medical problem, compared to a quarter of those 24 or younger. Older and younger inmates were equally likely to report having surgery.

About 1 in 8 jail inmates reported currently having arthritis

Jail inmates reported a wide-range of medical problems, with arthritis as the most common (13%), followed by hypertension (11%), and asthma (10%) (table 2). Heart problems (6%), followed by kidney problems and tuberculosis (4%) were the next most frequently reported medical conditions. With the exception of paralysis, stroke, and tuberculosis, female inmates reported higher levels of each specific type of medical problem than male inmates.

Women most likely to report cervical cancer, men skin cancer

Female inmates reported a higher rate of ever having cancer than males (831 per 10,000 inmates, compared to 108 per 10,000 inmates). By specific type of cancer, 490 per 10,000 female jail inmates reported ever having cervical cancer, 110 per 10,000 reported ovarian cancer, and 91 per 10,000 reported ever having breast cancer.

Male jail inmates most commonly reported ever having skin cancer (37 per 10,000 inmates), followed by lung cancer (15 per 10,000), and testicular and colon cancer (both 13 per 10,000).

| Type of cancer | Rate of those who reported ever having cancer by type per 10,000 inmates | |
|----------------|--------------------------------------------------------------------------|--------|
| | Male | Female |
| Any | 108 | 831 |
| Breast | 2 | 91 |
| Cervical | ~ | 490 |
| Uterine | ~ | 49 |
| Ovarian | ~ | 110 |
| Colon | 13 | 29 |
| Prostate | 11 | ~ |
| Testicular | 13 | ~ |
| Lung | 15 | 16 |
| Skin | 37 | 69 |
| Leukemia | 10 | 34 |

~ Not applicable.

Table 1. Estimated number and percent of jail inmates who reported a medical problem, by conviction status, gender and age, 2002

| | Current medical problem* | | Had surgery since admission | | Dental problem since admission | |
|--------------------------|--------------------------|---------|-----------------------------|---------|--------------------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent |
| All inmates | 229,300 | 36.9% | 8,800 | 1.4% | 159,000 | 25.6% |
| Conviction status | | | | | | |
| Convicted | 121,700 | 35.8% | 5,500 | 1.6% | 89,900 | 26.5% |
| Unconvicted | 67,800 | 37.7 | 2,000 | 1.1 | 44,700 | 24.9 |
| Both | 38,700 | 39.2 | 1,400 | 1.4 | 23,600 | 23.9 |
| Gender | | | | | | |
| Male | 191,500 | 34.8% | 7,600 | 1.4% | 138,400 | 25.2% |
| Female | 37,800 | 52.6 | 1,200 | 1.7 | 20,600 | 28.7 |
| Age | | | | | | |
| 24 or younger | 46,600 | 25.0% | 1,700 | 0.9% | 44,200 | 23.7% |
| 25-34 | 66,500 | 33.7 | 3,700 | 1.9 | 49,300 | 25.0 |
| 35-44 | 70,200 | 43.3 | 2,500 | 1.5 | 45,500 | 28.1 |
| 45 or older | 46,000 | 60.5 | 1,000 | 1.3 | 20,000 | 26.4 |

Note: Number of inmates with each problem was estimated and then rounded to the nearest 100. See Appendix tables for standard errors for the survey estimates.

*Inmates were determined to have a current medical problem if they reported currently having at least 1 of 14 specific problems: arthritis, asthma, cancer, diabetes, a heart condition, hypertension, kidney problems, liver problems, paralysis, problems due to a stroke, hepatitis, HIV, a sexually transmitted disease, or tuberculosis.

Table 2. Percent of jail inmates reporting specific current medical problems, by gender and age, 2002

| Current medical problem | All inmates | Gender | | Age | | | |
|------------------------------|-------------|--------|--------|---------------|-------|-------|-------------|
| | | Male | Female | 24 or younger | 25-34 | 35-44 | 45 or older |
| Arthritis | 12.9% | 12.0% | 19.4% | 5.3% | 9.4% | 16.6% | 32.5% |
| Asthma | 9.9 | 8.7 | 19.4 | 10.9 | 10.8 | 8.9 | 7.3 |
| Cancer | 0.7 | 0.5 | 2.5 | 0.2 | 0.7 | 0.6 | 2.2 |
| Diabetes | 2.7 | 2.5 | 4.1 | 0.6 | 2.3 | 2.9 | 8.4 |
| Heart problem | 5.9 | 5.5 | 9.2 | 4.4 | 4.6 | 6.4 | 11.7 |
| Hypertension | 11.2 | 10.8 | 14.1 | 5.3 | 8.5 | 14.3 | 26.1 |
| Kidney problems | 3.7 | 3.0 | 8.9 | 2.3 | 4.0 | 4.4 | 4.8 |
| Liver problems | 0.9 | 0.8 | 1.6 | 0.1 | 0.4 | 1.3 | 3.4 |
| Paralysis | 1.3 | 1.3 | 1.3 | 0.3 | 1.3 | 1.7 | 3.1 |
| Stroke | 3.2 | 3.2 | 3.3 | 1.3 | 2.9 | 4.9 | 4.8 |
| Hepatitis | 2.6 | 2.3 | 5.0 | 0.4 | 1.4 | 4.6 | 7.2 |
| HIV | 1.3 | 1.2 | 2.3 | 0.2 | 1.1 | 2.1 | 2.7 |
| Sexually transmitted disease | 0.9 | 0.8 | 2.0 | 0.7 | 0.7 | 1.0 | 1.7 |
| Tuberculosis* | 4.3 | 4.3 | 4.0 | 2.2 | 3.8 | 5.3 | 8.6 |

*Includes all inmates who reported ever having TB.

Heart valve damage was the most commonly reported heart problem

An estimated 880 jail inmates per 10,000 reported ever having a heart problem, including heart valve damage (290 per 10,000 inmates), arrhythmia (211 per 10,000), and angina (130 per 10,000). About 126 per 10,000 had suffered a heart attack.

| Heart condition | Ever heart problem per 10,000 inmates, by type |
|-----------------------|------------------------------------------------|
| Any | 880 |
| Angina | 130 |
| Arrhythmia | 211 |
| Hardening of arteries | 38 |
| Heart attack | 126 |
| Heart disease | 95 |
| Valve damage | 290 |
| Tachycardia | 74 |
| Other | 43 |

Prevalence of a medical problem did not change with time served

Inmates who had served a year or more were as likely as those who had served 7 or fewer days to report a current medical problem (about 38%) (table 3). As time served increased, jail inmates who reported having had surgery or a dental problem since admission increased. Among inmates who had served 7 or fewer days, 0.2% reported surgery since admission, compared to 1.6% who had served from 61 to 180 days. About 3.5% of jail inmates who had served more than a year reported having surgery since admission.

Jail inmates who had served more than a year were nearly 3 and a half times more likely than those who had served 7 or fewer days to report having a dental problem since admission.

More than a third of jail inmates reported an impairment

An estimated 227,200 jail inmates said they had an impairment, including a learning, speech, hearing, vision, mobility, or mental impairment (table 4). About 1 in 5 jail inmates said they considered themselves to have a disability (not shown in a table).

Around 22% of jail inmates reported a learning impairment, such as dyslexia or attention deficit disorder, or having been enrolled in special education

classes. About 6% of jail inmates reported difficulty hearing a normal conversation even when wearing a hearing aid. Among jail inmates, 11% reported difficulty seeing ordinary newsprint even when wearing glasses.

Based on a single survey question, 8% of jail inmates reported having a mental or emotional condition that kept them from participating fully in school, work, or other activities. In a recent BJS study, an estimated 64% of jail inmates were found to have a mental health problem. This measure was based on a series of survey questions about prior diagnoses of a mental health problem or symptoms of a mental disorder as specified in the Diagnostic and Statistical Manual of Mental Disorder, DSM-IV. It was not restricted to impaired functioning due to a mental health condition. (See *Mental Health Problems of Prison and Jail Inmates*, available at <<http://ojp.usdoj.gov/bjs/mhppji.htm>>.

Females most likely to report a physical or mental impairment, males a learning impairment

Overall, 39% of female inmates and 36% of male inmates reported having any physical or mental impairment (table 5). Male inmates were more likely than female inmates to report a learning impairment (22% compared to 18%).

Females more commonly than males reported a vision impairment (14% compared to 11%) or a mental impairment (15% compared to 7%).

More than 40% of inmates age 45 or older reported an impairment

Inmates age 45 or older were the most likely to report having a physical or mental impairment, followed by those 24 or younger. Forty-four percent of jail inmates age 45 or older and 38% of those age 24 or younger said they had a physical or mental impairment.

Among the specific physical impairments, 12% of jail inmates age 45 or older reported difficulty hearing, 24% reported difficulty seeing, and 7% had a problem with mobility. A tenth of those age 45 or older said they had a mental impairment.

Table 3. Current medical problems reported by jail inmates, by time served, 2002

| Time since admission | Current medical problem | Percent of inmates Since admission | |
|----------------------|-------------------------|------------------------------------|----------------|
| | | Had surgery | Dental problem |
| 7 or fewer days | 38.2% | 0.2% | 12.2% |
| 8-14 days | 34.3 | 0.7 | 15.2 |
| 15-30 days | 37.3 | 0.4 | 19.9 |
| 31-60 days | 36.8 | 0.8 | 24.6 |
| 61-180 days | 37.4 | 1.6 | 30.9 |
| 181-364 days | 35.6 | 3.9 | 35.1 |
| 1 year or more | 37.8 | 3.5 | 42.4 |

Table 4. Estimated number and percent of jail inmates with an impairment, 2002

| Type of impairment | All inmates | | Convicted | | Unconvicted | | Both ^a | |
|-----------------------|-------------|---------|-----------|---------|-------------|---------|-------------------|---------|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| Any | 227,200 | 36.6% | 119,300 | 35.2% | 66,400 | 37.0% | 40,000 | 40.6% |
| Physical | 210,500 | 33.9 | 110,800 | 32.7 | 61,500 | 34.3 | 36,900 | 37.5 |
| Learning | 133,800 | 21.7 | 70,300 | 20.8 | 38,300 | 21.5 | 24,500 | 25.0 |
| Speech | 23,200 | 3.7 | 11,400 | 3.4 | 7,900 | 4.4 | 3,700 | 3.8 |
| Hearing | 39,900 | 6.4 | 21,200 | 6.3 | 10,800 | 6.0 | 7,300 | 7.5 |
| Vision | 69,700 | 11.3 | 35,400 | 10.5 | 22,000 | 12.3 | 11,600 | 11.8 |
| Mobility ^b | 10,500 | 1.7 | 4,900 | 1.4 | 4,200 | 2.3 | 1,400 | 1.5 |
| Mental | 51,500 | 8.3 | 24,400 | 7.2 | 16,700 | 9.3 | 9,700 | 10.0 |

Note: Number of inmates with each impairment or mental condition was estimated and then rounded to the nearest 100. Detail equals more than total because inmates may have had more than one impairment.

^aIncludes inmates with a prior conviction, but no new conviction for the current charge.

^bIncludes use of a cane, wheelchair, walker, hearing aid, or other aids in daily activity.

Inmates age 24 or younger (28%) were more than twice as likely as those 45 or older (11%) to report a learning disability. Four percent of both inmates age 24 or younger and those age 45 or older reported a speech impairment.

15% of jail inmates had 2 or more impairments

Jail inmates typically reported having one impairment (21%). About 10% reported two impairments, and nearly 6% reported having three or more. The number of impairments varied little by age. Inmates age 35 or older (17%) were slightly more likely than those 34 or younger (14%) to have 2 or more impairments.

| Number of impairments | Percent of jail inmates by age | | |
|-----------------------|--------------------------------|---------------|-------------|
| | Total | 34 or younger | 35 or older |
| 0 | 63.4% | 64.8% | 61.1% |
| 1 | 21.2 | 20.8 | 21.9 |
| 2 | 9.8 | 9.2 | 10.8 |
| 3 or more | 5.6 | 5.2 | 6.2 |

Around 1 in 8 jail inmates reported being injured since admission to jail

Overall, an estimated 82,900 jail inmates (13%) reported being injured since admission (table 6). Inmates were equally likely to report that they had been injured in an accident (7%) as to report that they had been injured in a fight (7%).

Injuries highest among male and younger inmates

Among jail inmates, men (14%) were more likely than women (10%) to report being injured since admission. About 7% of males, compared to 4% of females, reported being injured in a fight. Male and female jail inmates reported nearly the same rate of being injured in an accident.

Jail inmates age 24 or younger (17%) were more than twice as likely to have been injured since admission than inmates age 45 or older (8%). They were more than five times as likely to report being injured in a fight since admission (11% compared to 2%).

The percent of inmates who reported being injured in an accident slightly decreased as age increased. About 8% of inmates age 24 or younger reported being injured in an accident, compared to 6% of those age 45 or older.

Violent offenders had higher rates of fight-related injuries

About 11% of violent offenders in jail reported being injured in a fight since admission, compared to 6% of property and drug offenders and 5% of public-order offenders.

| Most serious offense | Percent of jail inmates since admission | |
|----------------------|-----------------------------------------|--------------------|
| | Injured in an accident | Injured in a fight |
| Violent | 8.8% | 10.8% |
| Property | 7.1 | 6.4 |
| Drug | 7.0 | 6.2 |
| Public-order | 6.6 | 4.6 |

Inmates with an impairment had higher rates of injuries

Among inmates with an impairment, nearly 10% reported being injured in an accident and 10% reported being injured in a fight. Around 6% of those without an impairment had been injured.

Inmates who reported a mental impairment were almost twice as likely as those not reporting a mental impairment to be injured in a fight or in an accident since admission. Nearly 13% of those with a mental impairment were injured in a fight and 12% were injured in an accident. Among those without a mental impairment, almost 7% had been injured in a fight or in an accident.

Table 5. Impairments of jail inmates, by gender and age, 2002

| | Percent of inmates who reported an impairment | | | | | | |
|---------------|-----------------------------------------------|----------|--------|---------|--------|-----------|--------|
| | Any impairment | Learning | Speech | Hearing | Vision | Mobility* | Mental |
| Gender | | | | | | | |
| Male | 36.3% | 22.1% | 3.8% | 6.3% | 10.8% | 1.7% | 7.5% |
| Female | 38.7 | 18.0 | 3.3 | 7.6 | 14.4 | 1.7 | 14.9 |
| Age | | | | | | | |
| 24 or younger | 37.5% | 28.4% | 4.0% | 4.0% | 7.3% | 0.3% | 7.1% |
| 25-34 | 33.0 | 21.1 | 3.3 | 5.2 | 8.2 | 1.0 | 7.2 |
| 35-44 | 36.5 | 19.8 | 3.9 | 8.1 | 13.5 | 1.8 | 10.5 |
| 45 or older | 44.0 | 10.7 | 4.1 | 12.0 | 24.1 | 6.9 | 9.9 |

*Includes use of a cane, wheelchair, walker, hearing aid, or other aids in daily activity.

Table 6. Percent of jail inmates who reported an injury since admission, by conviction status, gender and age, 2002

| Characteristics | Percent of inmates who reported an injury since admission | | |
|-------------------|-----------------------------------------------------------|----------------|------------|
| | Total | In an accident | In a fight |
| Total | 13.4% | 7.4% | 7.0% |
| Conviction status | | | |
| Convicted | 12.6% | 7.9% | 5.9% |
| Unconvicted | 15.6 | 7.5 | 8.8% |
| Both | 12.1 | 5.5 | 7.7 |
| Gender | | | |
| Male | 13.8% | 7.5% | 7.4% |
| Female | 10.1 | 6.7 | 4.1 |
| Age | | | |
| 24 or younger | 17.4% | 8.2% | 10.6% |
| 25-34 | 13.6 | 7.5 | 7.2 |
| 35-44 | 11.2 | 7.1 | 4.8 |
| 45 or older | 7.8 | 5.8 | 2.5 |

| Type of impairment | Percent of jail inmates since admission | |
|--------------------|-----------------------------------------|--------------------|
| | Injured in an accident | Injured in a fight |
| Physical | | |
| Yes | 9.7% | 9.8% |
| No | 6.3 | 5.6 |
| Mental | | |
| Yes | 11.6% | 12.9% |
| No | 7.0 | 6.5 |

Likelihood of injury increased with time served in jail

Among jail inmates who had served 7 or fewer days at the time of the interview, 4% reported an injury compared to 30% of those jail inmates who had served 1 year or more at the time of the interview (table 7).

The risk of injury due to an accident or a fight increased with time served. About 3% of jail inmates who had served 7 or fewer days reported being injured in an accident, compared to 17% of inmates who had served 1 year or more at the time of interview. Jail inmates who had served 1 or more years at the time of interview were 8 times as likely (16%) to report being injured in a fight as those who had served 7 or fewer days (2%), and about 2½ times as likely as those who had served between 31 and 60 days (7%).

Male inmates incarcerated between 15 days and 1 year were more likely to have been injured than female inmates (figure 1). Among those who had been incarcerated more than 1 year at the time of the interview, females were more likely than males to have been injured.

As time served in jail increased, the prevalence of injuries among inmates age 34 or younger and inmates age 35 or older increased (figure 2). Except for inmates who had served 7 or fewer days, inmates age 34 or younger consistently had higher rates of injuries than those age 35 or older as time served increased.

Jail inmates who reported any impairment had higher rates of injuries than other inmates, regardless of how long they had served in jail (figure 3).

Regardless of the time served in jail, violent jail inmates had higher rates of fight-related injuries than other inmates (figure 4). Among jail inmates who had served 7 or fewer days, nearly 3% of violent offenders and 2% of nonviolent offenders reported having been injured in a fight. Among those inmates who had served a year or more, 22% of violent offenders said they had been injured in a fight, compared to 12% of nonviolent offenders.

Table 7. Percent of jail inmates who reported an injury since admission, by time served, 2002

| Time since admission | Percent of inmates who reported an injury | | |
|----------------------|-------------------------------------------|----------------|------------|
| | Total | In an accident | In a fight |
| 7 or fewer days | 4.3% | 2.7% | 2.0% |
| 8-14 days | 5.3 | 3.5 | 2.0 |
| 15-30 days | 7.1 | 3.9 | 3.5 |
| 31-60 days | 13.1 | 7.1 | 6.5 |
| 61-180 days | 16.6 | 9.1 | 9.1 |
| 181-364 days | 21.0 | 11.2 | 11.4 |
| 1 year or more | 30.0 | 17.0 | 15.9 |

Injuries reported by inmates since admission, by gender and time served

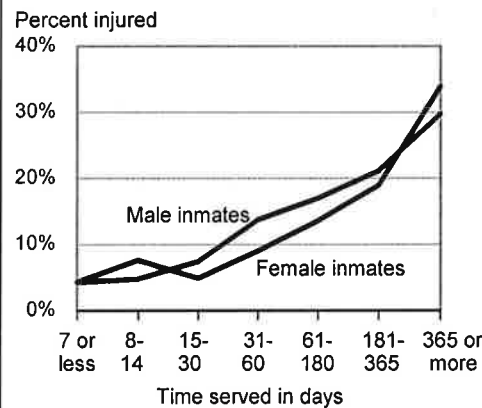


Figure 1

Injuries reported by inmates since admission, by age and time served

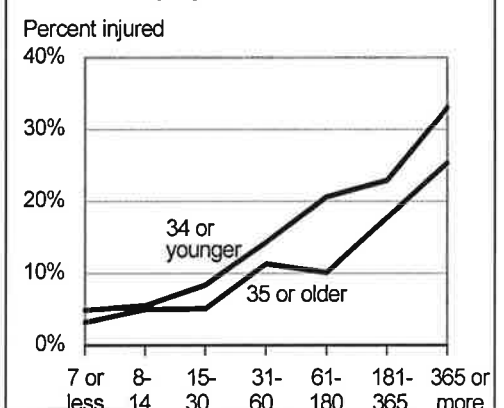


Figure 2

Injuries reported by inmates since admission, by physical impairment or mental and time served

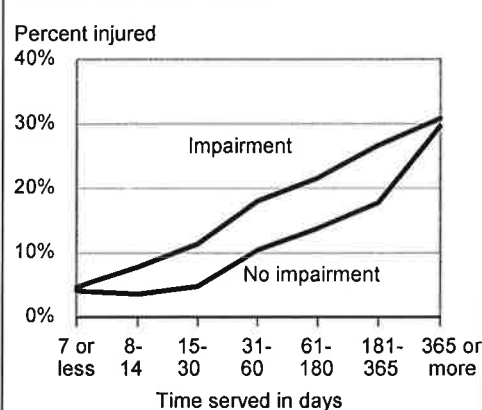


Figure 3

Fight-related injuries reported by inmates since admission, by offense and time served

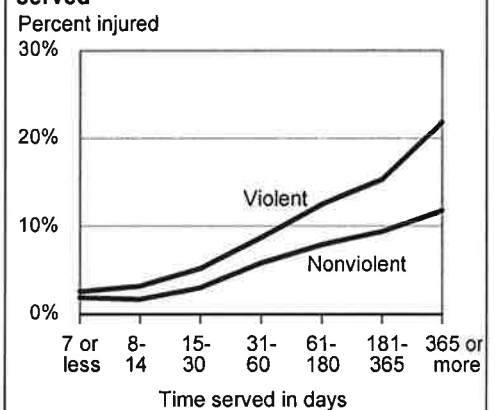


Figure 4

Health-related problems more common among homeless or unemployed inmates

Of jail inmates who reported being homeless or living in a shelter in the year prior to arrest, nearly half said they had a current medical problem or a physical or mental impairment, compared to a third of those who were not homeless (table 8).

Medical problems and physical or mental impairments were also more prevalent among inmates who reported being unemployed before their arrest or receiving government assistance. Nearly 44% of jail inmates who were unemployed in the month prior to their arrest, compared to 34% of those who were employed, reported having a physical or mental impairment. About 41% of inmates who were unemployed and 35% who were employed reported having a current medical problem.

More than half (57%) of jail inmates who received financial support from government agencies in the month prior to arrest reported a current medical problem. About a third (34%)

of jail inmates who received income from wages reported a current medical problem.

Fifty-five percent of inmates who received income from government transfers reported having a physical or mental impairment, compared to 33% of those who reported receiving wages.

Medical problems common among inmates with a history of drug use or dependence

Jail inmates who reported ever using drugs (38%) were more likely than those who never used drugs (31%) to report a current medical problem. Thirty-eight percent of inmates who ever used drugs, compared to 30% of those who never used drugs, reported an impairment. An estimated 53% of jail inmates who reported ever using a needle to inject drugs said they had a current medical problem, compared to 35% of those who did not use a needle. About 45% of jail inmates who used a needle to inject drugs, compared to 37% of those who did not, reported having a physical or mental impairment.

Among jail inmates dependent on or abusing drugs, 4 in 10 reported having a physical or mental impairment, compared to about 3 in 10 inmates who were not dependent on drugs.

Among jail inmates who were dependent on or abusing alcohol, two-fifths reported a current medical problem, compared to about a third of those who were not dependent or abusing alcohol. About 40% of those dependent on or abusing alcohol had an impairment, compared to 34% of those who were not dependent on or abusing alcohol. Alcohol or drug abuse or dependence is based on symptoms for diagnosing substance dependence or abuse in the Diagnostic and Statistical Manual of Mental Disorders - fourth edition (DSM-IV) (See *Substance Dependence, Abuse, and Treatment of Jail Inmates, 2002*, BJS Special Report, www.ojp.usdoj.gov/bjs/abstract/sdatji02.htm.)

Table 8. Health-related conditions reported by jail inmates, by selected background characteristics, 2002

| | Percent of inmates | | | | |
|-----------------------------------|-------------------------|------------|-----------------|---------|----------------|
| | Current medical problem | Impairment | Since admission | | |
| | | | Injured | Surgery | Dental problem |
| Homeless in year before arrest | | | | | |
| Yes | 48.8% | 48.8% | 16.4% | 2.4% | 31.3% |
| No | 34.9 | 34.6 | 12.9 | 1.3 | 24.6 |
| Employed in month before offense | | | | | |
| Yes | 35.0% | 33.5% | 13.6% | 1.5% | 25.3% |
| No | 41.1 | 43.6 | 12.9 | 1.2 | 25.0 |
| Source of income | | | | | |
| Wages/salary | 34.1% | 32.5% | 13.2% | 1.3% | 24.6% |
| Government transfers | 57.1 | 54.8 | 16.1 | 1.5 | 27.3 |
| Other | 39.4 | 38.9 | 16.8 | 1.6 | 30.0 |
| Alcohol dependence or abuse | | | | | |
| Yes | 39.6% | 40.0% | 13.4% | 1.4% | 27.2% |
| No | 34.5 | 33.6 | 13.5 | 1.5 | 24.0 |
| Ever used drugs | | | | | |
| Yes | 38.0% | 38.0% | 14.0% | 1.4% | 27.4% |
| No | 31.2 | 30.0 | 10.5 | 1.5 | 17.0 |
| Used drugs in month before arrest | | | | | |
| Yes | 36.9% | 38.4% | 13.8% | 1.9% | 29.0% |
| No | 35.8 | 34.2 | 10.8 | 1.2 | 21.6 |
| Used needle to inject drugs | | | | | |
| Yes | 53.1% | 44.5% | 14.4% | 2.1% | 32.7% |
| No | 34.7 | 36.6 | 14.0 | 1.3 | 26.3 |
| Drug dependence or abuse | | | | | |
| Yes | 39.0% | 40.3% | 15.6% | 1.8% | 29.5% |
| No | 34.0 | 32.2 | 10.9 | 1.1 | 20.9 |

Most inmates reported receiving health assessment or medical exams since admission

About 80% of inmates reported that at the time of admission they were questioned about their health or medical history. Nearly half said that staff checked them to see if they were sick, injured, or intoxicated.

More than 4 in 10 jail inmates reported having a medical examination since admission to jail. A third of inmates reported having a blood test since admission. Six in ten inmates said they had been tested for TB, and more than 2 in 10 reported they had been tested for HIV.

| Medical service provided | Percent of all jail inmates |
|-----------------------------------------------------------------|-----------------------------|
| At time of admission | |
| Staff checked to see if you were sick, injured, or intoxicated? | 47.3% |
| Staff asked questions about your health or medical history? | 81.1 |
| Staff asked if you had ever thought about suicide? | 79.4 |
| Since admission | |
| Has anyone pricked your skin to test for TB? | 62.6% |
| Have you had a blood test for any reason? | 33.6 |
| Has your blood been tested for HIV? | 21.6 |
| Have you had a medical exam? | 43.1 |

Among jail inmates who reported a current medical problem, 42% also reported visiting a health care professional because of the medical problem. Twenty percent of inmates who had been injured reported seeing a health care professional, as did 21% of those who said they had a dental problem.

| | Percent of inmates who saw a health care professional* |
|-------------------------|--------------------------------------------------------|
| Current medical problem | 41.8% |
| Injury | 20.4 |
| Dental problem | 20.5 |

*Of inmates who reported a medical problem.

Since their admission to jail, 44% of female jail inmates reported having a medical examination. Nearly 20% reported having a pelvic exam. About 5% were pregnant at time of admission. Among those female inmates who were pregnant at the time of admission, 48% had received an obstetrics exam since admission and 35% had received some type of pregnancy care, such as instructions on child care, exercises, special diet, medication, or special testing.

| | Percent of female jail inmates |
|-------------------------------------|--------------------------------|
| Had a medical exam since admission? | 44.0% |
| Had a pelvic exam since admission? | 19.8 |
| Were you pregnant at admission? | 5.2 |
| If yes to pregnant: | |
| Had an obstetric exam? | 48.0% |
| Received pregnancy care? | 34.9 |

Methodology

Data in this report are based on hour-long personal interviews with jail inmates. As part of an omnibus survey conducted every 5 to 6 years, these questions provide an opportunity to estimate the prevalence of a variety of diseases, illnesses, chronic problems, and other health-related conditions of inmates.

In the 2002 Survey of Inmates in Local Jails, offenders were randomly selected from a nationally representative sample of facilities and were asked questions regarding their current offense and sentence, criminal history, personal and family background, physical impairment and mental condition, and medical problems since admission to prison. Detailed descriptions of the methodology and sample design can be found in *Profile of Jail Inmates, 2002*, available at <<http://www.ojp.usdoj.gov/bjs/abstract/pji02.htm>>.

The accuracy of the survey estimates presented in this report depends on two types of error: sampling and non-sampling.

Sampling error is the variation that may occur by chance because a sample rather than a complete numeration of the population was conducted.

Nonsampling error can be attributed to many sources, such as nonresponses, differences in the interpretation of questions among inmates, recall difficulties, and processing errors. The accuracy of the estimates depends on the ability and willingness of inmates to report such problems. Inmate self-reported data may underestimate the prevalence of some medical conditions, especially those problems that require more sophisticated diagnosis and those that are more sensitive in nature. In any survey the full extent of the nonsampling error is never known.

The sampling error, as measured by an estimated standard error, varies by the size of the estimate and the size of the base population. Estimates of the standard errors for selected characteristics have been calculated (see appendix tables at <<http://www.ojp.usdoj.gov/bjs/abstract/mpji02.htm>>).

Exhibit D

NEW: Unemployment, higher education, and deaf& hard of hearing people:
A quick snapshot of research findings. (2011)

[Ross E. Mitchell, February 2005]

Can you tell me how many deaf people there are in the United States?

[**Note:** You will need to obtain the Adobe Acrobat Reader in order to view several of the documents mentioned below.]

This seemingly straightforward question does not have a simple answer. The answer is not simple because various definitions of deafness are used, depending on where you look for answers, each leading to a different estimate for the number of deaf people in the United States. Below, we discuss the various surveys used to estimate the size of the deaf population and report the answers they offer.

Please note that here at the Gallaudet Research Institute (GRI), we do not routinely collect data that would answer this question. The GRI manages the *Annual Survey of Deaf and Hard of Hearing Children and Youth*. The *Annual Survey* pertains only to those young people identified by their schools as receiving educational services related to their deafness. We do not manage surveys of the adult deaf and hard of hearing population.

A Brief Summary of Estimates for the Size of the Deaf Population in the USA Based on Available Federal Data and Published Research:

- **About 2 to 4 of every 1,000 people in the United States are "functionally deaf,"** though more than half became deaf relatively late in life; **fewer than 1 out of every 1,000 people in the United States became deaf before 18 years of age.**
- However, if people with a severe hearing impairment are included with those who are deaf, then the number is 4 to 10 times higher. That is, **anywhere from 9 to 22 out of every 1,000 people have a severe hearing impairment or are deaf.** Again, at least half of these people reported their hearing loss after 64 years of age.
- Finally, if everyone who has any kind of "trouble" with their hearing is included then **anywhere from 37 to 140 out of every 1,000 people in the United States have some kind of hearing loss,** with a large share being at least 65 years old.

Where did we get the information for this summary?

SIPP and NHIS

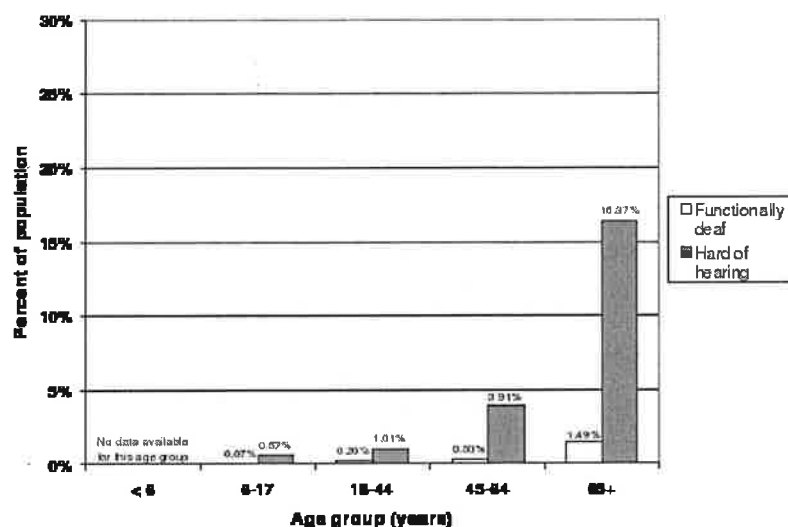
Estimates of the number of deaf and hard of hearing persons in the United States are typically based on one of two national household surveys conducted by the federal government: the National Health Interview Survey (NHIS) or the Survey of Income and Program Participation (SIPP). We provide a brief overview, in round numbers, of what these and other surveys offer as partial answers to the question of how many deaf people there are in the United States.

SIPP. The SIPP is a multi-wave panel survey conducted annually by the U.S. Census Bureau. The estimates from this survey appear to effectively separate those who are deaf from those who are hard of hearing. From Wave 5 of the 2001 panel, this *degree-of-hearing-loss distinction is based on an individual's or informant's response as to whether the individual should be identified as having "difficulty hearing what is said in a normal conversation with another person even when wearing your [his/her] hearing aid,"* with acceptable responses being "yes," "no," and "Person is deaf;" and if the answer is "yes," followed up by if the individual is **"able to hear what is said in normal conversation at all."** (for adults, Questions ADQ6 and ADQ7; for children, Questions CDQ11 and CDQ12)

We provide an independent analysis of SIPP public-use data files from the 2001 Panel, Wave 5. These data allow for *national-level* estimates of the *prevalence* of persons over five years of age in the United States who report some level of hearing impairment even with the use of a hearing aid. The advantage to this analysis is that we can classify persons with hearing impairment as either "functionally deaf" (namely, those identified as either unable to hear normal conversation at all, even with the use of a hearing aid, or as deaf) or hard of hearing.

Figure 1, below, summarizes the results from our analysis of the SIPP. The age-related pattern of reported hearing trouble makes it clear that most people with hearing impairment became deaf or hard of hearing due to age-related hearing loss – they had no "trouble" or "difficulty" hearing during childhood or early adulthood.

Figure 1. Percentage of persons who report difficulty hearing normal conversation by age group, United States, 2002



Across all age groups, in the United States, approximately 1,000,000 people (0.38% of the population, or 3.8 per 1,000) over 5 years of age are "functionally deaf;" more than half are over 65 years of age. About 8,000,000 people (3.7%) over 5 years of age are hard of hearing (that is, have some difficulty hearing normal conversation even with the use of a hearing aid). Again, more than half of those who are hard of hearing are over 65 years of age. We emphasize that these estimates are based upon self-reported (or informant-reported) hearing difficulty and not on independent audiometric measurements.

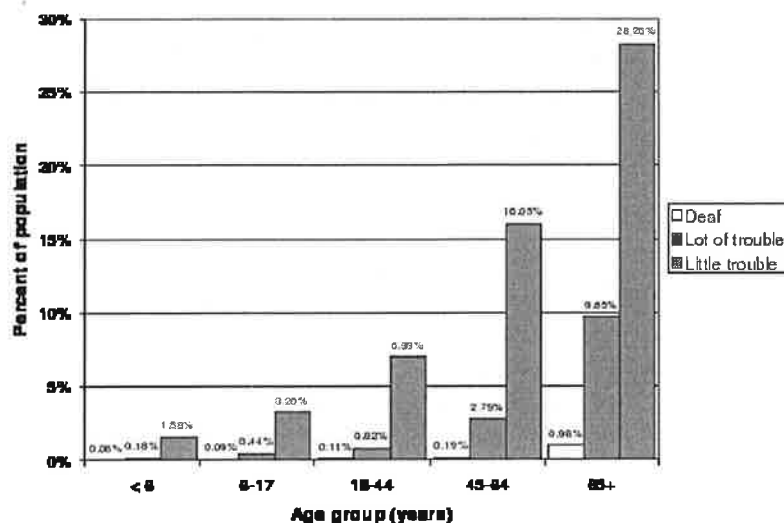
NHIS. The NHIS is conducted annually by National Center for Health Statistics (NCHS). *Degree of hearing loss or deafness is determined by an individual's or informant's response to the question, "Which statement best describes your [child's] hearing (without a hearing aid): good, a little trouble, a lot of trouble, or deaf?"* (for adults in 2003, Question ACN.420; for children in 2003, Question CHS.250)

But NHIS reports do not clearly distinguish those who are deaf from those who are hard of hearing. This is because all annually produced NHIS (Series 10) reports combine "a lot of trouble" and "deaf;" these categories are not reported separately. The reason for this combination is that there are too few persons identified as "deaf" in any given year to provide reliable estimates.

In order to report those with "a lot of trouble" hearing separately from those who are "deaf," we provide an independent analysis of NHIS public-use data files for the years 1997-2003. By combining multiple years in a single analysis, it is possible to dramatically improve the reliability of *national-level* estimates of the *prevalence* of persons in the United States who report some level of hearing impairment. That is, we can estimate the proportion of the population with a particular degree of hearing impairment during the time period from 1997-2003.

Figure 2, below, summarizes the results of this analysis of the 1997-2003 NHIS public-use data files. Just as noted above for the SIPP findings, there is a clear age-related pattern of reported hearing trouble because many respondents had "good" hearing during childhood or early adulthood.

Figure 2. Percentage of persons who report some level of hearing trouble by age group, United States, 1997-2003



Across all age groups, approximately 600,000 people in the United States (0.22% of the population, or 2.2 per 1,000) are "deaf;" more than half are over 65 years of age. About 6,000,000 people (2.2%) report having "a lot of trouble" hearing with, again, more than half over 65 years of age. Over 28,000,000 people (10%) report having "a little trouble" hearing with just less than a third over 65 years of age, but more than half over 45 years of age. Altogether, more than 35,000,000 people (13%) report some degree of hearing trouble. Again, we emphasize that these estimates are based upon self-reported (or informant-reported) hearing trouble and not on independent audiometric measurements.

If we were to compare the NHIS and SIPP results, it would not be a fair comparison. The NHIS responses are based upon hearing trouble *without* a hearing aid while SIPP responses are based upon hearing difficulty *even with* a hearing aid (note: not all persons with hearing difficulty wear a hearing aid, so persons who reported difficulty hearing may or may not use a hearing aid). Nonetheless, if a comparison must be made, only the responses for persons over 5 years of age should be considered. The only change to the "round numbers" resulting from ignoring responses for those under 6 years of age on the NHIS is that just less than 35,000,000 people over 5 years of age report some degree of hearing trouble without the use of a hearing aid. This hardly noteworthy change should not be too surprising since the prevalence of early childhood hearing impairment and deafness is low, so the number of persons to be subtracted from the overall total is small and has little effect on total population estimates.

Other Surveys

NHANES. The National Health and Nutrition Examination Survey (NHANES) has been conducted four times (periodically, over a multi-year period each time, since 1971) by NCHS. Unlike any of the other federal surveys, NHANES has identified degree of hearing loss audiometrically (i.e., by a formal pure-tone-threshold hearing test using an audiometer rather than from responses to a self-reported hearing loss scale). Based on analysis of NHANES III data, as well as regular and supplemental NHIS data from the early 1990s, a research team sponsored by the Project HOPE Center for Health Affairs estimated that somewhere from 400,000 to 700,000 people have a severe or profound hearing loss (those likely to be deaf; about 0.19% to 0.34% of the population, or 2 to 3 per 1,000).

Please note that the pure-tone-threshold audiometric data from NHANES III were only for persons 6 to 19 years of age. The current NHANES is collecting pure-tone-threshold audiometric data only for persons 20 to 69 years of age. Estimates for a person's degree of hearing loss from recent NHANES is otherwise based upon the same self-reported "hearing trouble" scale used in the NHIS.

Census 2000. As it turns out, the decennial census is not a good source for deafness statistics. This is because the sensory disability question on the census form (Question 16) did not separate those who are deaf from those who are blind. The U.S. Census Bureau estimates that there are over 9,000,000 people with a severe sensory disability (3.62% of the population). This estimate is not a simple sum of all self-identified deaf and blind persons, however, because some persons may have identified with having "a severe vision or hearing impairment" instead. Somewhere between one-quarter and one-half of this group is likely to be persons with deafness or a severe hearing impairment (i.e., about 0.9% to 1.8% of the population, or 9 to 18 per 1,000). Note that about half of these people are over 65 years of age, and about one-tenth under 18 years of age.

Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act (IDEA Child Count). For children and youth 6 to 21 years of age, the IDEA Child Count prepared by the Office of Special Education Programs (OSEP) offers some information on the prevalence of significant hearing loss among schoolchildren. Over 70,000 children and youth were identified as receiving IDEA-related special education because the child had a "hearing impairment" of educational significance, which is 0.15% (1 to 2 per 1,000) of the

total public K-12 school enrollment. However, the *Annual Survey* informs us that there are many hard of hearing children receiving special education (about 58%), not just deaf children (about 42%), which would lead to estimates that fewer than 1 of every 1,000 public schoolchildren is a deaf child receiving special education while about 1 of every 1,000 is a hard of hearing child in special education.

How many people are "Deaf" and how many use ASL?

For the last several years, many writers have distinguished between those who are deaf and those who are "Deaf." The capitalization indicates sociolinguistic affiliation in addition to audiological distinction. None of the above federal survey activity inquires about special language use or social identification among those who are deaf (or hard of hearing). That is, there are no questions about American Sign Language (ASL) or any other signed language use on federal surveys. The only study that helps to answer this question was done over 30 years ago (before IDEA, ADA, Section 504 of the Rehabilitation Act, etc.). Based upon this old survey (part of a project known as the National Census of the Deaf Population [NCDP]), we first estimated there may have been 500,000 persons who signed at home in 1972 (about 0.24% of the population), only slightly over half of whom were deaf (280,000 or 0.14% of the population). In other words, in 1972, a little more than 1 of every 1,000 people in the United States was a deaf person who reported s/he was a "good" signer.

However, if we were to take a more liberal view of who would have counted as an ASL user among those responding to the NCDP then, of course, our numerical estimates would be higher. That is, including those NCDP respondents who identified themselves as "fair" or "poor" signers results in an estimated 642,000 persons who signed at home in 1972, more than half of whom were deaf (375,000 or 0.19% of the population). These and other estimates are discussed at greater length elsewhere:

Mitchell, Ross E., Travas A. Young, Bellamie Bachleda, and Michael A. Karchmer. 2006, in press. "How Many People Use ASL in the United States? Why Estimates Need Updating." *Sign Language Studies*, Vol. 6, No. 3.

There is really no way to know if the proportion of deaf signers in 1972 has stayed close to the same over the last few decades. Certainly, the medical, legal, social, economic, and educational circumstances for Americans who are deaf have changed significantly since the NCDP. Nonetheless, if the proportion of deaf signers has remained roughly the same, then they would continue to number in the hundreds of thousands today (360,000 to 517,000). Please keep in mind that this final estimate is just that, an estimate (and a very rough one at that), and is not based on any new data.

Additional sources and links:

For additional information on deaf and hard of hearing persons in the United States, please contact the National Center for Health Statistics (NCHS) or the US Census Bureau.

More detailed or sophisticated analyses of the total deaf and hard of hearing population in the United States, as determined using NCHS measures, would require obtaining the NHIS and NHANES data files or await future NCHS Series 10 and NCHS Series 11 reports, respectively. Similarly, access to analyses using Census measures requires obtaining SIPP data files or awaiting future SIPP P-70 Reports.

For national estimates from 1990-91, which provide a careful breakdown by level of "hearing trouble" and other demographic characteristics, please refer to the GRI's *Demographic Aspects of Hearing Impairment: Questions and Answers* (Third Edition), 1994.

As noted above, the Project HOPE Center for Health Affairs published a more narrowly focused analysis. "The Severely to Profoundly Hearing Impaired Population in the United States: Prevalence and Demographics" draws from multiple national surveys during the early- to mid-1990s.

According to this review and reanalysis of national data (1990 and 1991 *NHIS Hearing Supplement*, 1994 and 1995 *NHIS*, and *NHANES III*), an estimated one-half million Americans have severe to profound hearing loss (those most likely to be called deaf), 8% of whom are children (3-17 years) and 54% of whom are adults 65 years of age or older.

Citation: Blanchfield, B. B., Dunbar, J., Feldman, J. J., & Gardner, E. N. (1999, August). *The severely to profoundly hearing impaired population in the United States: Prevalence and demographics*. Bethesda, MD: Project HOPE Center for Health Affairs. (A shorter *Policy Analysis Brief* [Series H, Volume 1, Number 1, October 1999] was published as well.)

For current summary information about a large sample of deaf and hard of hearing children identified for educational services, see the *Annual Survey: 2002-2003 Regional and National Summary*. Additional inquiries about current analysis of the *Annual Survey* should be directed to Dr. Sen Qi.

Neither we at the GRI nor those at the Census Bureau, NCHS, or OSEP can readily answer questions for which no reports have been prepared. Also, please note that **state- and local-level data on deaf and hard of hearing persons are rarely available**. We are not able to provide any information on obtaining such data, however, we recommend contacting state, county, or city public health departments to determine if such data are available.

Ross E. Mitchell, 15 February 2005

[Last modified: 2011.12.05 16:50:34. by Kevin Cole]

DISCLAIMER: This website contains documents with terms that may be considered by today's reader as outdated and even offensive. For example, the term "hearing impairment" is sometimes used as a category for levels of hearing loss, such as hard of hearing and deaf. Some people now see cultural

Exhibit E

Violent Offenders in a Deaf Prison Population

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Previous research suggested an unexplained difference in the patterns of offending behaviors among deaf people when compared to hearing people. This study, conducted in Texas, compares the incidence and types of violent offenses of a deaf prison population in comparison to the hearing prison population. Sixty-four percent of deaf prisoners were incarcerated for violent offenses in comparison to 49% of the overall state prison offender population. This finding is consistent with previous research. The most significant difference between the populations was found in the category of sexual assault, which represented 32.3% of deaf offenders in contrast to 12.3% of hearing state prison inmates overall. Factors potentially impacting violent offending by deaf persons are their vulnerability to child sexual abuse, use of chemicals, educational histories, and development of language and communication skills. Additionally, there is a widespread lack of accessible intervention and treatment services available to deaf sex offenders across the nation.

Violence rates in the United States are far greater than in any other industrialized nation in the world (Siegel, 2000). In addition, researchers have identified an overrepresentation of inmates with hearing loss in county jails and state prisons (Jensema, 1990; Zingeser, 1999). However, it is difficult to study violent offending by deaf people due to barriers such that the low prevalence of prelingually deaf people and the fact that the

justice system does not keep offender records based on hearing status (Harry & Dietz, 1985; Vernon & Greenberg, 1999). Although several researchers have made pioneering efforts to piece together information about deaf offenders from the service records of interpreting agencies and data from psychiatric institutions, these limitations have restricted the sample sizes and the generalizability of the research studies completed in this area (Harry & Dietz, 1985; Jensema, 1990; Jensema & Friedman, 1988; Klaber & Falek, 1963; Vernon & Greenberg, 1999; Young, Howarth, Ridgeway, & Monteiro, 2001; Young, Monteiro, & Ridgeway, 2000). Consequently, there is still considerable conjecture in the literature about criminality among deaf people as well as the prevalence and causes of aggression and sexual deviance reflected in deaf prison inmates (Miller & Vernon, 2002; Young et al., 2000).

By the 1960s, psychologists had developed the concept of a "deaf personality," typified by egocentrism, a lack of conscience, and aggressivity (Altschuler & Rainier, 1969; Klaber & Falek, 1963; Myklebust, 1964). Profoundly deaf people were perceived as more likely to commit crimes of violence and sexual deviance (von Hentig, 1979). This pathological view of a deviant deaf personality has since been largely rejected by current research (Lane, 1992; Vernon, 1996a; Young et al., 2000).

It is now recognized that society's responses to deaf offenders' mental health and communication needs are often inadequate or inappropriate (Bakke, 2000;

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Gibbs & Ackerman, 1999; Green, 2001; Kovaleski & Williams, 2001; Miller, 2001; Vernon & Coley, 1978; Vernon, Raifman, & Greenberg, 1999; Wilson by Branch v. North Carolina, 1996; Young et al., 2000). For example, one study of deaf offenders incarcerated in a hospital for the criminally insane included several participants who had committed only minor offenses, such as theft or indecent exposure (Harry & Dietz, 1985). Such placements are often due to misdiagnoses by psychologists and psychiatrists unfamiliar with deafness (Vernon & Raifman, 1997).

Contemporary researchers in deafness note that many prelingually deaf people share a number of common experiences such as social isolation, a lack of access to education, and minimal communication with their families due to language barriers. Not all deaf people respond aggressively to these circumstances (Vernon & Greenberg, 1999; Young et al., 2000). Still, it is understood that some of the common experiences of deaf people can significantly impact their level of functioning in terms of the ability to understand moral reasoning and the consequences of one's actions, particularly within the framework of the criminal justice system (Miller, 2001; Vernon, 1996b; Young et al., 2000).

Previous research, although limited in volume and sample sizes, suggests an unexplained difference in the patterns of offending behaviors among deaf people when compared to hearing people (Young et al., 2000). For example, some factors known to contribute to violent behavior, such as brain damage, are more prevalent in the deaf population (Vernon & Greenberg, 1999). This study reviews the incidence and types of violent offenses of a deaf prison population in comparison to the hearing prison population. Descriptive information is also provided on individual and social factors that may impact violent criminal offending by deaf persons. Specifically, the following five research questions were investigated:

1. Is there a significant difference in the percentages of deaf inmates and the general prison population who were convicted of violent offenses?

2. Is there a significant difference in the percentages of deaf inmates and the general prison population who were convicted of sexual assault?

3. Is there a significant difference in the percentages of inmates and the general prison population who were convicted of robbery?

4. Is there a significant difference in the percentages of deaf inmates and the general prison population who were convicted of homicide?

5. Is there a significant difference in the percentages of deaf inmates and the general prison population who were convicted of assault?

Method

Participants

This is a study of the entire population of male and female deaf state prisoners incarcerated in Texas. The participants were located at a centralized location. This is because the Texas Department of Criminal Justice (TDCJ) groups all its profoundly deaf offenders in one facility to promote efficacy in service provision. The Texas population of profoundly deaf offenders runs at about 85 inmates daily.

The total inmate population of the state of Texas ranged from 127,066 to 133,680 throughout 2001 (TDCJ Statistical Report, 2001; TDCJ Statistical Summary, 2001). Participants in this research consisted of all 99 deaf inmates incarcerated throughout a 90-day period in 2000, at which time this study was conducted. All 99 participants had a severe-to-profound hearing loss as evidenced by their prison medical records and their placement on a sheltered unit for offenders with disabilities. Of these, 89% self-reported that they were born deaf (Miller, 2001). Ninety percent used American Sign Language (ASL), home signs, or other manual communication systems as their primary mode of communication. There was essentially no difference in the racial makeup of the deaf and hearing offender groups, with roughly 43% African American, 32% White, and 25% Hispanic (Miller, 2001; TDCJ Statistical Report, 2001; Table 1).

Permission to view deaf inmates' medical records was obtained individually from each offender. This was done because of the high rate of functional illiteracy in this population, so that concepts such as voluntary participation and right to withdraw without penalty could be explained using the language most

Table 1 Race classifications of offenders incarcerated by the state of Texas

| Race | Deaf population ($N = 97^a$) | | Entire population ($N = 133,680^b$) | |
|-----------------|--------------------------------|------------|---------------------------------------|------------|
| | Number | Percentage | Number | Percentage |
| Black | 42 | 43.3 | 57,809 | 42.1 |
| White | 32 | 33.0 | 41,228 | 31.0 |
| Hispanic | 23 | 23.7 | 34,080 | 26.3 |
| American Indian | 0 | — | 563 | .6 |
| Total | 97 | 100.0 | 133,680 | 100.0 |

^aTwo inmates in the total deaf inmate population of 99 did not have any information recorded in the category of race.

^bThe entire Texas prison population of 133,680 as presented here includes the 99 deaf offenders who participated in this study.

Adapted from *Forensic Issues of Deaf Offenders* by K. R. Miller, 2001, Dissertation study, Lamar University, Beaumont, TX and from "Statistical Summary" by Texas Department of Criminal Justice, 2001, Huntsville, TX: Author. Retrieved from <http://www.tdcj.state.tx.us>.

readily understood by potential participants. Inmate medical records were then reviewed in order to obtain demographical statistics and information about criminal offenses and convictions.

The entire population of deaf prisoners was compared to the hearing prison population in the state of Texas. Information on the remaining hearing state prison population of 133,581 was obtained from the state of Texas Statistical Report and Statistical Summary (TDCJ Statistical Summary, 2001), which is available online from <http://www.tdcj.state.us.tx>

Statistical Analyses

The chi-square test of independence was used to test for possible differences in terms of percentages convicted of various offenses. The independent variable in each analysis was hearing status, the dependent variables were violent offenses, and the four subcategories of violent offenses as observed in this study were sexual assault, homicide, robbery, and assault.

Because there were only seven deaf women offenders, men and women were considered a single group rather than analyzed separately. However, we realize that the motives for criminal behaviors, types of offenses, and rehabilitative needs of women throughout incarceration are fundamentally different than those of male offenders (DeBell, 2001; Gondles, 2001; Miller, 2002).

For the purpose of our study, the crimes of rape, homicide, robbery, and assault comprised the category of violent offending (Siegel, 2000). This is consistent

with the crime categorization system used by the state of Texas (TDCJ Statistical Report, 2001). Rape, or sexual assault, is included because it is an aggressive or coercive act. The term for rape used by TDCJ is *sexual assault*, which includes the sexual assault of minors. Although 75% of pedophiles do not use overt physical force (Bartol, 1995; Vernon & Rich, 1997), tricking, threatening, or bribing a child to obtain sexual contact is considered an act of violence, because minors are not capable of knowingly consenting to engage in sexual activity as per the law.

Results

Addressing the first research question, deaf and hard of hearing inmates were found to be more likely to be convicted of violent offenses than the general population. Of the 99 deaf offenders, 64.6% were convicted of violent offenses, as opposed to 49.7% of the overall Texas prison population (TDCJ Statistical Report, 2001). This represents a significantly higher percentage of deaf violent offenders than in the hearing prison population, $\chi^2 (1, N = 127,066) = 8.93, p < .01$ (Table 2). The remaining four research questions address subcategories of violent offenses, and the answers for each question are presented below.

Sexual Offenses

In this deaf inmate population, there were 41 sex offenders, although only 32 were categorized as violent offenders (Table 2). Sex offenses such as peeping or

Table 2 Violent offenses of Texas state prison inmates

| Offense | Deaf population (<i>N</i> = 99) | | Nondeaf population (<i>N</i> = 127,066) | |
|----------------------|----------------------------------|------------|------------------------------------------|------------|
| | Number | Percentage | Number | Percentage |
| Sexual assault | 32 | 32.3 | 15,616 | 12.3 |
| Assault ^a | 16 | 16.1 | 13,358 | 10.5 |
| Homicide | 9 | 9.0 | 12,401 | 9.8 |
| Robbery | 7 | 7.0 | 21,689 | 17.1 |
| Total | 64 | 64.4 | 63,064 | 49.7 |

^aThis category includes Injury to a Child/Person, which is coded as Assault by TDCJ.

Adapted from *Forensic Issues of Deaf Offenders* by K. R. Miller, 2001, Dissertation study, Lamar University, Beaumont, TX and from "Statistical Report" by Texas Department of Criminal Justice, 2001, Huntsville, TX: Author. Retrieved from <http://www.tdcj.state.tx.us>.

indecent exposure were not included, because these are categorized as a nonviolent crime as per Texas state guidelines. Fifty-four percent of the 41 deaf offenders were convicted of sex offenses, including statutory rape, against male or female children under the age of 17, 14.6% were convicted of sexual assault against adult women, and 31.7% were convicted of sexual assaults for which no descriptive data were available (Miller & Vernon, 2002). In answer to the second research question, the 32.3% of deaf offenders incarcerated for violent sexual assault were found to make up a significantly higher percentage than those incarcerated for violent sexual assault in the hearing offender population (12.3%), $\chi^2(1, N = 127,066) = 36.89, p < .01$.

Robbery, Homicide, and Assault

Instrumental violence refers to behavior intended to improve the social or financial standing of the offender and is usually perpetrated against strangers (Siegel, 2000). Examples of this type of violent crime are armed robbery or performing a killing in order to initiate oneself into a street gang. Seven percent of this deaf offender population were convicted of robbery (Table 2). In contrast, 17.1% of the entire prison population in Texas were convicted of the same crime (TDCJ Statistical Report, 2001). A significantly lower percentage of the deaf violent offender population committed robbery than did the remaining offender population, $\chi^2(1, N = 127,066) = 6.45, p < .05$.

Expressive violence is a behavior that vents frustration, anger, or rage (Siegel, 2000). It is most often directed towards someone the offender knows. The

level of detail about each crime that was needed to determine whether the remaining deaf inmates had engaged in instrumental or expressive violence was not recorded in most offenders' medical files.

There were no cases of capital murder in this deaf state prison population, although an oral deaf woman who was a serial killer was executed by Texas for this crime in 2000 (Miller, 2002). Nine percent of this deaf offender population were convicted of murder or attempted murder and 16% were convicted of assault, including injury to a child or disabled/elderly person (Table 2). These percentages do not represent significant differences from figures presented for the entire Texas prison population regarding homicide [$\chi^2(1, N = 127,066) = 0.73$, not significant] and assault [$\chi^2(1, N = 127,066) = 3.36$, not significant].

Factors Associated with Violent Crime

Substance abuse. The use of alcohol is associated with crimes of violence. As many as 80% of all people arrested for violent offenses test positive for drugs (Siegel, 2000). In this study, there were limited data available in participants' medical files regarding drug and alcohol use by deaf offenders at the time their crimes were committed. Only four deaf violent offenders' medical records indicated that they had been intoxicated during the commission of their crimes, however, 62.5% reported a history of alcohol and/or marijuana use, 35.9% of whom reported the use of other substances, such as heroin, lysergic acid diethylamide, cocaine, speed, phencyclidine, inhalants, barbiturates, and hallucinogens (*N* = 64). In a previous

Table 3 Reading and educational achievement of a deaf violent offender population^a

| Grade level | Reading achievement test results (<i>N</i> = 47) | | Educational achievement test results (<i>N</i> = 45) | |
|-------------------|------------------------------------------------------|------------|----------------------------------------------------------|------------|
| | Number | Percentage | Number | Percentage |
| ≤2.8 ^b | 16 | 34.0 | 13 | 28.8 |
| 2.9–4.9 | 8 | 17.0 | 8 | 17.7 |
| 5.0–7.0 | 7 | 14.8 | 7 | 15.5 |
| ≥7.1 | 4 | 8.5 | 3 | 6.6 |

^aComparable data for the hearing prison population was not available.^bIndicates functional illiteracy.

study of 29 deaf murderers, half were intoxicated at the time of murder (Vernon et al., 1999).

Although some studies report a lower incidence of self-reported substance abuse among deaf persons, these responses may be influenced by factors such as incorrect diagnoses by service providers and deaf individuals' lack of access to treatment services (Leigh & Pollard, 2004; Pollard, 1994). It is estimated that substance abuse among deaf individuals is at least as prevalent as it is among hearing individuals (Guthman, 2002).

Intelligence. In Texas prisons, offenders' intelligence is measured during the intake process using the Revised Army Beta Test. The Beta is a nonverbal instrument that yields an IQ score. Deaf offenders who take the Beta test and do not receive a score within normal IQ ranges (85 or higher) are retested using the Test of Nonverbal Intelligence (TONI) or the Wechsler Adult Intelligence Scale—Revised (WAIS-R). IQ scores were available for 50 of the 64 deaf violent offenders in this study. The mean IQ of the deaf violent offenders was 93.4, as compared to the mean IQ of the total number of Texas prison offenders, which was 91.0 (TDCJ Statistical Summary, 2001). Both these scores indicate that the typical violent offender was of average range intelligence regardless of audiological status.

Educational Achievement. The educational achievement (EA) of offenders entering Texas prisons is determined by administering the Test of Adult Basic Education (TABE). It yields an EA grade level by averaging scores obtained in three areas: reading,

math, and language. The TABE scores in reading and the overall EA of the 47 deaf violent offenders for whom educational data were available are shown in Table 3.

Although statistical analyses were not possible without comparison data, the average reading grade level for deaf violent offenders was grade 3.5, which is well below the 4.5–5.5 reading level of the average deaf person upon leaving school at age 18 (Center for Assessment and Demographic Studies, 1996). The average EA of offenders in Texas prisons was grade 7.4 (TDCJ Statistical Summary, 2001). For the entire population of deaf violent offenders, the average EA was 3.6 (Miller, 2001). However, 34.0% of deaf violent offenders had reading levels of 2.8 or below, which is the federal government's standard for defining functional illiteracy.

Communication. Of the entire deaf offender population, there were 94 for whom language use information was available (Table 4). Of these, 89.3% (84) were using sign language or gestures to communicate, whereas the remaining offenders used spoken English or Spanish. Sixty-nine percent of the signing deaf population was using ASL, Pidgin Sign English (PSE or contact language), or Mexican Sign Language (LSM), whereas 20.2% of deaf offenders in the study possessed minimal language skills (MLS). MLS is characterized by markedly restricted sign language, English vocabularies and syntax, and impoverished social skills (Miller, 2001; Vernon, 1996a). In all probabilities, these individuals were linguistically incompetent to stand trial despite their convictions (Vernon, Steinberg, & Montoya, 1999). Their convictions thus

Table 4 Language use of a deaf prison population, $N = 94$

| Language | Number | Percentage |
|------------------------------------------------------------------------------------------|--------|------------|
| American Sign Language, Mexican Sign Language, or Pidgin Sign English (contact language) | 65 | 69.1 |
| Minimal language skills (MLS) | 19 | 20.2 |
| English | 9 | 9.6 |
| Spanish | 1 | 1.1 |

Adapted from *Forensic Issues of Deaf Offenders* by K. R. Miller, 2001, Dissertation study, Lamar University, Beaumont, TX.

may represent a major violation of their constitutional rights (Vernon & Miller, 2001).

Mental Disorders. Approximately 70% of state prisons screen inmates for mental illness ("One-fifth of mentally ill," 2001). Although the state of Texas provides mental health screening, limited data were available on psychiatric disorders in this deaf population. This may be due, in part, to difficulties inherent in diagnosing deaf individuals and in part to the fact that the mental health problems of deaf people may be exacerbated within the structure of a state prison (Gibbs & Ackerman, 1999; Young et al., 2000).

Approximately 32.8% of the deaf violent offender population of Texas were diagnosed with a psychiatric condition, over half of whom reported symptoms of depression or a depression-related illness. Persons with specific etiologies of deafness, such as spinal meningitis, premature birth, and cytomegalovirus, experience a somewhat greater incidence of depression than do other deaf people and hearing people who have never had these illnesses. Although little mental health statistics were available regarding the general prison population in Texas, reports on studies of offenders in other states indicate that 16% of all prison inmates are mentally ill, which is probably a modest estimate ("One-fifth of mentally ill," 2001; Randall, 1999).

Studies that review etiologies of hearing loss identify deaf individuals as at risk for brain damage than the general population (Leigh & Pollard, 2004; Vernon & Greenberg, 1999). This can impact an individual's ability to manage his or her anger appropriately. The deaf population experiences about the same incidence of mental illness as the hearing population (Pollard,

1994). However, because deaf people think and communicate differently than hearing people, misdiagnosis by clinicians inexperienced with this population has the potential to inflate the percentages of deaf people with mental illness (Leigh & Pollard, 2004; Pollard, 1994). Additionally, deaf persons are more at risk to experience a mental illness and substance abuse simultaneously than hearing individuals (Leigh & Pollard, 2004).

Discussion

In Texas prisons, for the year 2001, there were a significantly higher percentage of deaf violent offenders than hearing violent offenders in comparison to other types of offenses. Differences were also found in the types of violent offending by deaf inmates. A lower percentage of deaf violent offenders committed robberies than did the hearing offenders, whereas a higher percentage of deaf violent offenders committed sexual assaults. A possible explanation for the lower percentages of robberies among deaf violent offenders could be the language barrier. It would be difficult for a deaf person to adequately control the situation and instruct his or her victims during a robbery. Additionally, two or more deaf persons working together to commit a robbery would need a clear view of each other's faces for communication purposes and would not be likely to cover their heads. This would expose them to easy recognition by their victims.

Substantially more deaf violent offenders were convicted of sexual assault than was the case with hearing violent offenders. There are a number of theories that address contributing factors in sexual offending by deaf people. Evidence exists, which indicates that deaf

children are more likely to be sexually abused than those who are hearing (Schwartz, 1995; Sullivan, Vernon, & Scanlon, 1987). Sexually abused children are at a high risk to become sex offenders ("Natural born predators," 1994). Sexual abuse may occur due to vulnerabilities in young deaf children in terms of their living situation and communication skills. For instance, young deaf children who attend residential schools and live in dorms may be at a heightened risk for sexual abuse by older youth and caretakers. Dorm living provides greater access for youth who are engaged in sexual experimentation or adults who are sexual predators.

Many deaf children receive little or no sex education presented in sign language by responsible adults. This is due, in part, to the caretakers' lack of knowledge of the appropriate signs of sexual behavior (Harry, 1984). Residential schools are cherished in the Deaf community, partly because they are recognized as a place where peers teach peers to communicate using ASL (Moore & Levitan, 1993). However, depending on other deaf youth for language and sex education can lead to an inadequate understanding of appropriate social and sexual behaviors.

In terms of reporting sexual abuse, deaf children who are language delayed may not possess the language skills to be able to identify body parts and actions taken against them. Previous research also suggested that deaf children who report sexual abuse may not receive an appropriate response from school administrators in terms of making police reports or removing an abuser from the campus (Sullivan et al., 1987).

There were no substantial differences between deaf violent offenders and the remaining hearing offender population in terms of race, sex, or IQ. However, deaf violent offenders had substantially lower levels of academic achievement and reading ability, which is representative of existing differences between deaf and hearing people in general.

Self-reported substance abuse appeared to be somewhat lower in the deaf violent offender population than is estimated for inmate populations in general (Bureau of Justice, 1995). The incidence of diagnosed mental disorders among deaf violent offenders was double what was self-reported for inmate populations in other states.

The vast majority of the deaf prison population in Texas communicated using ASL or some other form of manual communication (Miller, 2001). One-fifth of deaf prisoners demonstrated MLS (Table 4). The use of a sign language interpreter is usually the best way to accommodate a signing deaf defendant, so that he or she can understand the charges and assist in building a defense (Miller & Vernon, 2001). It is impossible for individuals who cannot communicate effectively using any spoken, signed, or written languages to receive their constitutionally guaranteed due process rights (Miller & Vernon, 2001, 2002). One proposed solution to this problem is to develop regional centers for deaf defendants and those convicted in trials in which their due process rights were violated due to a lack of accommodation or failure to recognize linguistic incompetence. Deaf defendants could reside in these facilities until they learn enough language to allow for a reasonable understanding of legal proceedings (Davis, 1993; Vernon & Miller, 2001).

Current social approaches to the needs of profoundly deaf persons present substantial barriers to the identification, intervention, and research of those at risk for violent offending. In general, these barriers most often occur when agencies and professionals fail to recognize the importance of providing appropriate accommodations. For example, chemically dependent deaf people almost always receive less access to after-care and other essential support programs because communication services, primarily interpreters, are not made available (Guthman, 2002). Only small numbers of educators and service providers are aware of sign language that describes sexual behavior as used by deaf people (Harry, 1984; Job, 2004). Thus, sex education and knowledge of illegal sexual behavior is often lacking. This problem is compounded because deaf persons with mental disorders are frequently misdiagnosed by professionals unskilled in sign language (Vernon, 2001). Deaf victims of domestic violence cannot receive effective interventions until visually accessible public education is provided on the topic (Egley, 1983). As a consequence of these factors, frequently deaf people have been inappropriately incarcerated or institutionalized (Bakke, 2000; Kovaleski & Williams, 2001; Lockhart, 2001; Wilson by *Branch v. North Carolina*, 1996).

Continued, in-depth research on violent offending by deaf persons is needed in order to better understand the causative traits and social factors present in this population and to develop effective interventions. Future research should include studying the sociological records of deaf violent offenders as gathered by TDCJ and at other state correctional facilities. Such data have the potential to provide detailed and rich personal histories of deaf violent offenders. This information would allow researchers to obtain a more accurate description of deaf inmates than has previously been available, such as information about whether the individual committed instrumental or expressive violence, the rates of deaf-on-deaf crime, and the opportunity to examine other relevant social variables not readily evident in deaf inmates' medical records.

References

- Altschuler, K., & Rainier, J. D. (1969). *Comprehensive mental health service for the deaf* (2nd ed.). New York: State Psychiatric Institute.
- Bakke, D. (2000). *God knows his name: The true story of John Doe #24*. Carbondale, IL: Southern Illinois University Press.
- Bartol, C. R. (1995). *Criminal behavior: A psychological report*. Englewood Cliffs, NJ: Simon & Schuster.
- Bureau of Justice Statistics. (1995, March). *Substance abuse and treatment of adults on probation* (No. NCJ 166611). Retrieved June 30, 2005, from <http://www.ojp.usdoj.gov/bjs/drugs.htm>
- Center for Assessment and Demographic Studies. (1996). *Score summary for Stanford Achievement Tests, hearing impaired version* (9th ed.). Washington, DC: Gallaudet University Press.
- Davis, L. (1993, October 4). Prisoners of silence. *Nation*, 257, 354-356.
- DeBell, J. (2001). The female offender: Different...not difficult. *Corrections Today*, 63, 56-61.
- Egley, L. C. (1983). Domestic abuse among deaf people: One community's approach. *Victimology: An International Journal*, 7, 24-34.
- Gibbs, A., & Ackerman, N. (1999). Deaf prisoners: Needs, services, and training issues. *Prison Service Journal*, 122, 32-33.
- Gondles, J. A., Jr. (2001). Female offenders—The major issues. *Corrections Today*, 63, 6.
- Green, F. (2001, August 27). For deaf inmates, a struggle to be heard: Prisons often fail to meet needs. Richmond, VA: *Times Dispatch*.
- Guthman, D. (2002, July 2). An analysis of variables that impact treatment outcomes of chemically dependent deaf and hard of hearing individuals. Retrieved from http://home.earthlink.net/~drblood/minn/articles/analysis_ad.htm
- Harry, B. (1984, October). A deaf sex offender. *Journal of Forensic Sciences*, 29, 1140-1143.
- Harry, B., & Dietz, P. E. (1985). Offenders in a silent world—Hearing impairment and deafness in relation to criminality, incompetence, and insanity. *Bulletin of the American Academy of Psychiatry Law*, 13, 85-96.
- von Hentig, H. (1979). *The criminal and his victim—Studies in the sociology of crime*. New York: Schocken Books.
- Jensema, C. K. (1990). Hearing loss in a jail population. *Journal of the American Deafness and Rehabilitation Association*, 24, 49-58.
- Jensema, C. K., & Friedman, R. W. (1988). Criminal justice and the deaf, part II. *The Voice*, 4, 19-22.
- Job, J. (2004). Factors involved in the ineffective determination of sexual information from individuals who are deaf or hard of hearing. *American Annals of the Deaf*, 149, 264-273.
- Klaber, M., & Falek, A. (1963). Delinquency and crime. In J. Rainer, K. Altschuler, & F. Kallman (Eds.), *Family and mental health problems in a deaf population* (pp. 141-154). New York: Columbia University Press.
- Kovaleski, S. F., & Williams, C. (2001, September 2). Jail's mistakes leave deaf man confined to solitary for 2 years. *Houston Chronicle*.
- Lane, H. (1992). *The mask of benevolence*. New York: Knopf.
- Leigh, I. W., & Pollard, R. Q. (2004). Mental health and deaf adults. In M. Marschark & P. Spencer (Eds.), *Oxford handbook of deaf studies, language, and education* (pp. 203-215). New York: Oxford University Press.
- Lockhart, G. (2001, January). Man wins settlement from DC police. *Silent News*, 33(1).
- Miller, K. R. (2001). *Forensic issues of deaf offenders*. Doctoral dissertation, Lamar University, Beaumont, TX.
- Miller, K. R. (2002). *Deaf culture behind bars: Signs and stories of a Texas population*. Salem, OR: AGO Publications.
- Miller, K. R., & Vernon, M. (2001). Linguistic diversity in deaf defendants and due process rights. *Journal of Deaf Studies and Deaf Education*, 6, 226-234.
- Miller, K. R., & Vernon, M. (2002). Assessing linguistic diversity in deaf criminal suspects. *Sign Language Studies*, 4, 380-390.
- Moore, M., & Levitan, L. (1993). *For hearing people only*. Rochester, NY: Deaf Life Press.
- Myklebust, H. (1964). *The psychology of deafness*. New York: Grune & Stratton.
- Natural born predators. (1994, September 19). *U.S. News and World Report*, 117, 64.
- One-fifth of mentally ill prisoners not treated. (2002, April 17). Retrieved March 20, 2005, from <http://www.usatoday.com/news/washdc/july01/2001-07-15-prisoners.htm>
- Pollard, R. Q. (1994). Public mental health service and diagnostic trends regarding individuals who are deaf or hard of hearing. *Rehabilitation Psychology*, 39, 147-160.
- Randall, K. (1999, July 15). More than a quarter million mentally ill in America's jails and prisons. Retrieved February 27, 2003, from http://www.wsws.org/articles/1999/jul1999/pris-j15_prn.shtml

- Schwartz, D. B. (1995). Effective techniques in treating survivors of child sexual abuse: Problematic areas in their application to the deaf population. *Sexuality and Disability*, 13, 135–144.
- Siegel, L. (2000). *Criminology* (7th ed.). Belmont, CA: Wadsworth/Thomson Learning.
- Sullivan, P. M., Vernon, M., & Scanlon, J. M. (1987). Sex abuse of deaf youth. *American Annals of the Deaf*, 132, 257–262.
- Texas Department of Criminal Justice. (2001). *Statistical report*. Huntsville, TX: Author. Retrieved from <http://www.tdcj.state.tx.us>
- Texas Department of Criminal Justice. (2001). *Statistical summary*. Huntsville, TX: Author. Retrieved from <http://www.tdcj.state.tx.us>
- Vernon, M. (1996a). Deaf people and the criminal justice system. *A Deaf American Monograph*, 46, 149–153.
- Vernon, M. (1996b). Psychosocial aspects of hearing impairment. In R. L. Show & M. A. Nerbonne (Eds.), *Audiologic rehabilitation* (pp. 229–263). Needham, MA: Simon & Schuster.
- Vernon, M. (2001). Assessment of individuals who are deaf or hard of hearing. In B. Bolton (Ed.), *Handbook of measurement and evaluation* (pp. 335–398). Githersburg, MD: Aspen Publishers.
- Vernon, M., & Coley, J. (1978). Violation of constitutional rights: The language impaired person and the Miranda warnings. *Journal of Rehabilitation and the Deaf*, 11, 1–8.
- Vernon, M., & Greenberg, S. F. (1999). Violence in deaf and hard of hearing people: A review of the literature. *Aggression and Violent Behavior*, 4, 259–272.
- Vernon, M., & Miller, K. R. (2001). Linguistic incompetence to stand trial: A unique condition in some deaf defendants. *Journal of Interpretation, Millennial Edition*, 99–120.
- Vernon, M., & Raifman, L. J. (1997). Recognizing and handling problems of incompetent deaf defendants charged with serious offenses. *International Journal of Law and Psychiatry*, 20, 373–487.
- Vernon, M., Raifman, L. J., & Greenberg, S. F. (1999). Violence in deaf and hard of hearing people: A review of the literature. *Aggression and Violent Behavior*, 4, 259–272.
- Vernon, M., & Rich, S. (1997). Pedophilia and deafness. *American Annals of the Deaf*, 142, 300–311.
- Vernon, M., Steinberg, A. G., & Montoya, L. A. (1999). Deaf murderers: Clinical and forensic issues. *Behavioral Sciences and the Law*, 17, 495–516.
- Wilson by Branch v. North Carolina. (1996). US District court for the Eastern District of NC, Lexis 16221; Decided and filed August 16, 1996.
- Young, A., Howarth, P., Ridgeway, S., & Monteiro, B. (2001). Forensic referrals to the three specialist psychiatric units for deaf people in the U.K. *The Journal of Forensic Psychiatry*, 12, 19–33.
- Young, A., Monteiro, B., & Ridgeway, S. (2000). Deaf people with mental health needs in the criminal justice system: A review of the literature. *The Journal of Forensic Psychiatry*, 11, 556–570.
- Zingeser, L. (1999). Communication disorders and violence. *Hearing Health*, 15, 26–30.

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